

### **AMENDMENTS TO THE DRAWINGS**

The original first sheet of drawings have been replaced with two replacement sheets. The attached replacement sheets of drawings includes changes to Figures 1 – 4. Figure 1 has been changed to a perspective view. It is submitted that the new perspective view is consistent with the originally-submitted figures and does not add new matter to the application. The perspective view provides a better view of how the cross-sections of Figures 2 and 3 are taken relative to one another.

Figures 1 and 2 have been changed in that the section line 3 – 3 previously shown in Figure 2 has been moved to Figure 1.

Figures 2 and 4 have been changed to add lines extending parallel to the longitudinal axis. This change is to make the drawings consistent with one another. The cross-section of the exemplary handle was shown as polygonal in the originally-filed Figures 1 and 3. The new lines correspond to locations two sides of the polygon intersect one another.

Figure 3 has been changed to remove the reference numeral "14" to make the drawings consistent with one another. "14" is used to identify the longitudinal axis of the handle 10 in Figures 2 and 4.

Figure 3 has also been changed to include new reference numerals and two non-structural reference axis' to support new claim terminology.

### **REMARKS**

After entry of this Amendment, claims 40 – 51 are pending in the application. Prior to this Amendment, claims 1 – 8, 19 – 27, and 36 – 40 had been cancelled. In this Amendment, claims 9 – 18 and 28 – 35 are cancelled. Claims 40 – 51 have been added are directed to the elected invention shown in Figures 1 – 4. Reconsideration of the application as amended is requested.

It is submitted that since all of the previously-pending claims have been cancelled, the rejections set forth in the Office Action dated 04/10/2007 are moot. New claim 41 recites a hollow tube with a wall thickness that about a longitudinal axis and includes a first range about the longitudinal axis of relatively thicker wall thickness and a second range about the longitudinal axis of relatively thinner wall thickness, *the first range and the second range operably associated with one another whereby the hollow tube is operable to provide tactile feedback to a user of the hollow tube as to the orientation of the hollow tube in the user's hand.* The capacity of the hollow tube to provide tactile feedback because of the arrangement of the various wall thicknesses was set forth in the application as filed in several paragraphs, including paragraphs [0007] and [0027], for example. The prior art of record fails to disclose or suggest this feature and therefore fails to render claim 41 unpatentable.

The terms "operably associated" and "operable" have been incorporated in claim 41. These terms have been recognized as acceptable for claiming how structural elements are related to one another to perform a designated function. In Innova/Pure Water Inc. v. Safari Water Filtration Systems Inc., 72 USPQ2d 1001, 1006 (CAFC 2004), the Court stated that "[operable] . . . is a general descriptive term frequently used in patent drafting to reflect a

functional relationship between claimed components." The term "associated" was also considered by the Court in Innova/Pure Water. The Court stated that "the word 'associated' merely reflects that the recited elements be joined in some kind of relationship." *Id.* at 1009. The decision in Innova/Pure Water also demonstrates that the function designated by the terms "operably associated" and "operable" is given patentable weight. As applied to the present matter, Innova/Pure Water requires that the function of providing "tactile feedback to a user of the hollow tube as to the orientation of the hollow tube in the user's hand" be given patentable weight.

The Examiner has acknowledged that Brine, U.S. Pat. No. 6,752,730, fails to disclose or suggest a handle with variable wall thickness, much less a handle that is operable to provide tactile feedback. See page 3, lines 1 – 4 and 17 – 20 of the 04/10/2007 Office Action. Based on this deficiency of Brine, two alternative prima facie cases for obviousness have been asserted, a first based on the combination of Brine in view of Matinlassi, U.S. Pat. No. 4,233,834, and a second based on the combination of Brine in view of Merola, U.S. Pat. No. 3,697,069.

Matinlassi discloses a method for making a zircaloy tube. A zircaloy tube is used as cladding for nuclear reactor core structural components such as fuel and pressure tubes. The Examiner is directed to U.S. Pat. No. 4,398,552 as confirming the purpose and function of zircaloy tubes. The combination of Brine and Matinlassi is traversed as improper on several grounds. First, the Examiner has failed to set forth a reason why the person of ordinary skill would have combined Brine and Matinlassi. The Patent Office requires that a reason be given

for making a combination of references:

**Therefore, in formulating a rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed.**

Memorandum; May 3, 2007; to Technology Center Directors from Margaret A. Focarino, Deputy Commissioner for Patent Operations. The proposed reason for the combination is/are "cost and design considerations." However, not even a single cost and/or design consideration is articulated. Thus, the proposed reason appears to be nothing more than a label and not a reasoned explanation for the combination. There is no cost or design consideration set forth in the record that would point to the proposed combination.

Second, a combination of references must be made with analogous art. Art can be characterized as "analogous" based on the field of endeavor, classification, the nature of problem solved, or similarities and differences in structure *and* function. In this matter, none of those criteria render Brine and Matinlassi analogous to one another:

- Brine is directed to a lacrosse stick and Matinlassi to a cold forming operation for metal.
- Brine is classified in class 473, GAMES USING TANGIBLE PROJECTILE; Matinlassi is classified in class 72, METAL DEFORMING. Class 473 does not reference to class 72 and class 72 does not reference to class 473.
- Brine is directed to providing a handle with improved grip. '730 patent, column 1, lines 44 – 45. Matinlassi is directed to reducing eccentricity and spirality in zircaloy tubes. '834 patent, column 1, lines 19 – 20 and 47 – 48.

- In Brine, the lacrosse handle is structured as a hollow shaft of polygonal cross-section and functions by being grasped and moved by lacrosse player. In Matinlassi, the zircaloy tube is structured as a hollow tube of generally circular cross-section and functions as cladding for nuclear reactor core structural components including fuel and pressure tubes. M.P.E.P. 2141.01(a) cites several cases that demonstrate mere structural similarity does not render two references analogous; similar function must also be present.

Third, Matinlassi discloses that eccentricity, or varied wall thickness, is an *undesirable* quality and thus teaches away from modifying Brine to include an eccentric wall thickness:

Tubes of this type have been produced in the general manner described below, but *difficulty has been encountered because there is eccentricity in the wall-thickness* and spirality is produced with respect to the eccentricity. Column 1, lines 26 – 31, (emphasis added).

When tubes of this type are placed into service, *the eccentricity tends to result in a bowing* of the tube. The tubes are held in position by *spacer grids which may be in the position to restrain the bowing action* of the tubes. Column 1, lines 40 – 44, (emphasis added).

*The present invention is directed toward reducing the eccentricity* and the spirality. Column 1, lines 47 – 48, (emphasis added).

Thus, the express and unambiguous disclosure of Matinlassi teaches away from an eccentric wall.

Pursuant to M.P.E.P. § 706.02(j), Applicants request the Examiner to set forth the specific relevant teachings of the prior art relied upon with reference to the relevant column or page numbers and line numbers to support the prima facie case if the rejection is maintained. Specifically, the Applicants request that the Examiner communicate (1) a specific cost or design

consideration for making the combination of Brine and Matinlassi, (2) the basis for asserting that Brine and Matinlassi are analogous, and (3) the disclosure in the record that rebuts the express disclosure of Matinlassi that teaches away from eccentric walls. M.P.E.P. § 706.02(j) requires clarity so that the Applicants may given a fair opportunity to reply.

Merola discloses a ball bat with eccentrically thickened walls. The Examiner states that it would have been obvious to one of ordinary skill in the art at the time of the invention to have employed the cross-sectional area of Merola with the shaft of Brine in order to provide a stronger shaft for checking during play. However, combining Merola with Brine would not result in lacrosse handle operable to provide to provide tactile feedback to a user of said hollow tube as to the orientation of said hollow tube in the user's hand. Merola unambiguously discloses that a user of the ball bat will not appreciate the orientation of the ball bat relative to the thickness section of the bat wall without visual inspection. At column 1, Merola discloses:

swaged can thereby be used and the body of the bat 45 kept within acceptable weight limits. An indicia can be placed on the bat to assist a batter in properly orienting it, as is now done with wood bats where orientation of the wood grain is recommended.

At column 3, Merola again acknowledges the failure of the ball bat to provide tactile feedback:

grain. A suitable external marking can be provided on the ball bat of the present invention is assisting the batter to align the bat properly.

After the body 11 has been formed the vibration- 35

Thus, none of the three references being asserted against the previously-pending claims disclose or suggest the invention recited in claim 41.

New claims 41 – 51 introduce new terminology. M.P.E.P. § 608.01(o) states the "applicant is not limited to the nomenclature used in the application as filed" when selecting claim terminology. In addition, M.P.E.P. § 2163.07(a) states that an application may be amended to recite a function, theory or advantage that was inherent in the disclosed device and that such amendments do not constitute new matter. The new terminology used in claims 41 – 51 is fully supported by Figure 4 as originally-filed. M.P.E.P. § 608.01(o) instructs that the applicant should amend the specification whenever nomenclature in the specification is departed from in order to have clear antecedent basis in the specification. This Amendment also includes amendments to the specification in the form of new paragraphs [0026a] – [0026d] and an amendment to paragraph [0027] to include the claim terminology selected by the Applicants. Every sentence of the new paragraphs [0026a] – [0026d] finds support in Figure 4 as originally-filed. This Amendment also includes replacement sheets with changes to Figure 4 to incorporate new reference numerals introduced in new paragraphs [0026a] – [0026d]. All of the amendments to the specification merely describe what was shown in Figure 4 as originally-filed.

It is submitted that the amendments have antecedent basis in the application as filed and that the amendments do not add new matter to the application. It is further submitted that the amendments place the claims of the application in suitable condition for allowance; notice of which is respectfully requested. If the Examiner believes that prosecution of the application can be expedited by way of an Examiner's amendment, the Examiner is invited to contact the Applicants' attorney at the telephone number listed below.

The under-signed attorney is acting pursuant to M.P.E.P. § 405.

Respectfully submitted,

Dickinson Wright PLLC  
Attorneys for Applicants

Date: August 10, 2007

By: /Raymond C. Meiers/  
Raymond C. Meiers  
Reg. No. 51,081

Dickinson Wright, PLLC.  
38525 Woodward Ave., Suite 2000  
Bloomfield Hills, MI 48304-2970  
(248) 433-7393